

5 Process for the preparation of aqueous emulsions of blocked  
polyisocyanates

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10 Abstract

15 This invention relates to a process for the preparation of  
aqueous emulsions of blocked (poly)isocyanates, this process comprising  
the steps consisting successively in:

a) placing an isocyanate composition containing free  
isocyanate functions in contact with at least one blocking agent A in the  
presence of a surfactant B and an aqueous phase, the said isocyanate  
composition being added gradually to a stock containing at least some of  
the aqueous phase and at least some of the blocking agent;  
and optionally,

20 b) subjecting the mixture obtained to a shear (speed gradient)  
of greater than  $1000 \text{ s}^{-1}$ , preferably greater than  $20,000 \text{ s}^{-1}$  and less than  
 $1,000,000 \text{ s}^{-1}$ , preferably less than  $200,000 \text{ s}^{-1}$ , and

25 c) repeating step b), optionally after step a) has been  
repeated, until a stable emulsion is obtained whose particles have a  
Sauter diameter of greater than  $0.1 \mu\text{m}$ , preferably  $0.2 \mu\text{m}$ , and less than  
30  $5 \mu\text{m}$ , preferably less than  $2 \mu\text{m}$ , and a dispersion width of less than  $5 \mu\text{m}$ .

Figs.: none